

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

LaMotte Co., Inc.

Maryland Technology Extension Service

Product Flow Analysis

Client Profile:

LaMotte Co., Inc., is one of the country's largest manufacturers and distributors of water testing equipment. Established in 1919, LaMotte designs and manufactures chemical test kits and electronic instruments used to analyze inorganic factors in water, soil, and air. The company has an annual sales of between \$10 million and \$24.9 million. LaMotte is located in Chestertown, Maryland, and employs 135 people.

Situation:

LaMotte contacted the Maryland Technology Extension Service (MTES), a NIST MEP network affiliate, for assistance in resolving ergonomic issues in its shipping department. MTES consultants determined that in addition to ergonomic issues there was a product flow problem. Products would pile up on LaMotte's conveyor system to be processed, and then there would be a rush to meet the deadlines.

Solution:

MTES consultants, in cooperation with associates in the shipping department, arranged a new cellular flow for LaMotte's product processing and shipping departments, linking manual and machine operations into the most efficient combination to maximize value-added content, while minimizing wasted motion and valuable resources. MTES incorporated LaMotte's request for a two-line conveyor system, using one line for unregulated material and the other for material requiring processing and documentation. Cellular flow also provides shorter lead-times, improves quality, reduces inventories, simplifies scheduling, and minimizes material handling. The new layout eliminated the ergonomic issues associated with excess handling, lifting and awkward positions. The company purchased lift tables, allowing packers to adjust their work to a height comfortable for them regardless of the carton size and material being packed. These lift tables were integrated into the conveyor system.

Results:

- * Improved order packing productivity by 50 percent.
- * Improved shipping department productivity by 100 percent.
- * Reduced floor space by 1000 square feet.
- * Reduced travel time in shipping cell and order picking by 50 percent.
- * Improved workflow.
- * Improved employee efficiency and productivity.
- * Improved employee morale.

Testimonial:

"We now have a balanced work line, work load, and flow of our material. The amount of product we had piled up on the conveyor went from 80 feet down to 40 feet. We used to do a lot of picking early in

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the day and then loaded the conveyor up. Now we're putting some on and working it off. Wait times on the conveyors were also cut in half. We have one person picking now instead of two or three. The extra people move down the line, do the packing and documentation, and then finish the processing. Product moves more quickly. Overall productivity for the shipping department has improved from 50 to 100 percent. People are more productive. They're happier, they're used to it, and they work well together in the cell."

Herman Wefelmeyer, Jr., Director of Manufacturing